

# 2021 Annual Report

**OPTICA**  
FOUNDATION

Formerly  
**OSA**

# Table of Contents

Letter from the Chair	2
Annual Fund Programs	4
Early-Career Opportunities	8
Milton & Rosalind Chang Pivoting Fellowship	8
Thomas F. Deutsch Fellowship in Biomedical Optics	10
Bernard J. Couillaud Prize in Ultrafast Lasers	12
Ivan P. Kaminow Outstanding Early-Career Professional Prize	14
Tingye Li Innovation Prize (OFC)	16
Tingye Li Innovation Prize (CLEO)	18
Student Opportunities	20
Harvey M. Pollicove Memorial Scholarship In Precision Optics	20
Boris P. Stoicheff Memorial Scholarship	21
Corning Women in Optical Communications Scholarship & Travel Grants	22
Corning Outstanding Student Paper Competition	24
Theodore Maiman Outstanding Student Paper Competition	25
Optica Women Scholars	26
Researcher Opportunity	27
James P. Gordon Memorial Speakership	27
NextGen Institute	28
Siegman International School on Lasers	28
Subsea Optical Fiber Communications School	28
Innovation School	28
Career Accelerator on Optics & Photonics	28
Additional Opportunities and Oximeters for COVID-19 Detection	29
Optica 2021 Award and Medal Winners	30
2021 Investment and Impact	39
Board of Directors	40
Lifetime Donors	42
Planned Giving	43
Annual Donors	44

# Letter from the Chair



I'm delighted to share with you the Optica Foundation's programs and impacts in 2021. The following pages showcase honorees representing excellence in our community. Many are just beginning their careers, and their contributions will shape both science and society in the future.

In addition to the individuals we recognize, we offer programs and resources to enhance skills and hone talent. These programs are part of our NextGen Institute, a series of schools and accelerators with topics ranging from science and engineering frontiers, professional development, entrepreneurship. These events establish connections with mentors and peers worldwide.

The following pages have one program I don't want to wait until the 2022 Annual Report to share: the Amplify Scholarship for Black Scientists.

In response to the lack of Black representation in optics and photonics, the 2016-2020 classes of Optica Ambassadors developed the Amplify Scholarship. The ambassadors led the fundraising effort, securing founding donors Thorlabs and Meta. Other major supporters joined the effort, including Corning Incorporated, Federico Capasso, Harvard University; IPG Photonics Society in honor of the late

Valentin Gapontsev; JA Woollam Incorporated; OFS Laboratories; and Synopsys.

This program will award 10 US\$7,500 scholarships to undergraduate and graduate-level Black scientists over the next five years. The call for applications was held from December 2021 to January 2022, and we have recently announced the first class of Amplify Scholars. For the inaugural year, the foundation board of directors approved recognizing an additional five of the applicants, making 15 outstanding scholars.

Another program we are launching is the Optica Women Scholars, a concept proposed by 1997 Optica President Janet Fender and her husband L. John Otten. Janet and John recognized a need to encourage more women to study optics and photonics and stay in our field. Nine other US\$100,000 donors joined them: Elizabeth Rogan, Optica CEO; II-VI Incorporated; Corning Incorporated; Google LLC; Innolight; Intel; Meta; Neophotonics; and Source Photonics.

The foundation board of directors joined those donors and matched them with a US\$1,000,000 contribution from our reserves. To support this initiative, additional contributions have been received from Edmund Optics and Optica Past Presidents Ursula Gibson, Joseph Goodman, James C. Wyant, and Eric Van Stryland.

Now fully funded, we will be welcoming the first class of 20 Optica Women Scholars in 2022. (page 26 features the first two recipients through a pilot with the James C. Wyant College of Optical Science at the University of Arizona). Over the next ten years, 200 women will receive a US\$10,000 scholarship.

And we are not slowing down, as more new high-impact programs are in development!

Please enjoy this 2021 retrospective of the foundation's journey and accomplishments. I also encourage you to join us in supporting the next generation in our field and the advancement of their careers.

Eric Mazur  
Chair, Optica Foundation Board of Directors  
2017 Optica President

# Annual Fund Programs

The foundation's annual fund supports a variety of programs including new opportunities and pilot programs of interest to our donors and beneficiaries.

The [Optica Ambassador Program](#) is a marquee opportunity. As emerging leaders, ambassadors provide career advice, technical knowledge, and mentorship with students and early-career professionals by supporting professional development events at meetings and engaging with their communities. We received 55 applications and selected ten to participate in the 2021 class.



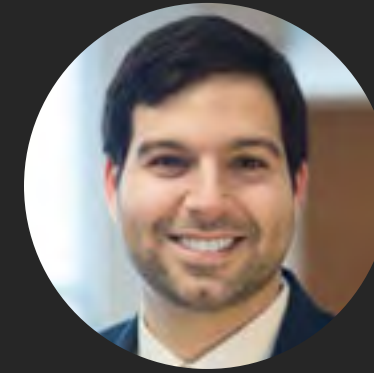
**Abubakar Isa Adamu**  
*Lumenity Limited, United Kingdom*



**Linhui Yu**  
*Harvard Medical School and  
Massachusetts General Hospital, USA*



**Nataliia Mysko-Krutik**  
*Institute for Low Temperature  
Physics and Engineering, Ukraine*



**Orad Reshef**  
*University of Ottawa, Canada*



**Michael Williams**  
*Boston Electronics, USA*



**Julia Majors**  
*Meta, USA*



**Tatevik Chalyan**  
*Vrije Universiteit Brussel, Belgium*



**Emerson Barbano**  
*Federal University of Parana (UFPR), Brazil*



**Margaret Dominguez**  
*NASA, USA*



**Francesco Da Ros**  
*Technical University of Denmark, Denmark*



**Middle East Technological University, Turkey**

# Annual Fund Programs

Optica Student Chapters receive grants for unique programs focused on professional development, education outreach, and diversity & inclusion. *Pictured: METU Optica Student Chapter, one of 400+ worldwide. This particular chapter's 2021 events included preparing ten "Spectrum Seminars," with the kickoff focused on laser filamentation; a virtual celebration for the International Day of Light focused on the importance of optical devices from ancient Egypt and Greece and their evolution into the present day optics; connections with academic and industry leaders; and, a few social events as their communities were able to get together again.*

In addition to grant support, 64 chapters received professional Zoom accounts in 2021. Over the last year, 1,200+ meetings have taken place, impacting 6,100 students. Chapters engaged in over 30,000 hours of content with the largest contingent of attendees from India, Ukraine, Mexico, Ghana, and Russia.

During the pandemic, many students lost access to essential tools and resources at their universities. In partnership with VPIphotonics and Zemax, we provided simulation and design software to students residing in emerging economies. 58 students from 17 countries were granted one-year licenses based on their use proposals.

Also supported by the foundation's annual fund in 2021, the Diversity and Inclusion Advocacy Recognition honors individuals and organizations significantly impacting areas of diversity and inclusion.

The 2021 recipients were:



**Fujitsu Network Communications** is supporting greater inclusion and equality within their company through initiatives that celebrate and advance Black, LGBTQ+, and women employees.



**ICFO** is setting the standard for incorporating equitable, transparent, and inclusive policies and programs into institutional hiring practices and technical programming.

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# Milton & Rosalind Chang Pivoting Fellowship

This fellowship provides unrestricted funding to talented, early-career optical scientists and engineers who believe their expertise can improve society outside of the lab. We encourage those with vision and exceptional talent to apply and pursue a new-found passion.

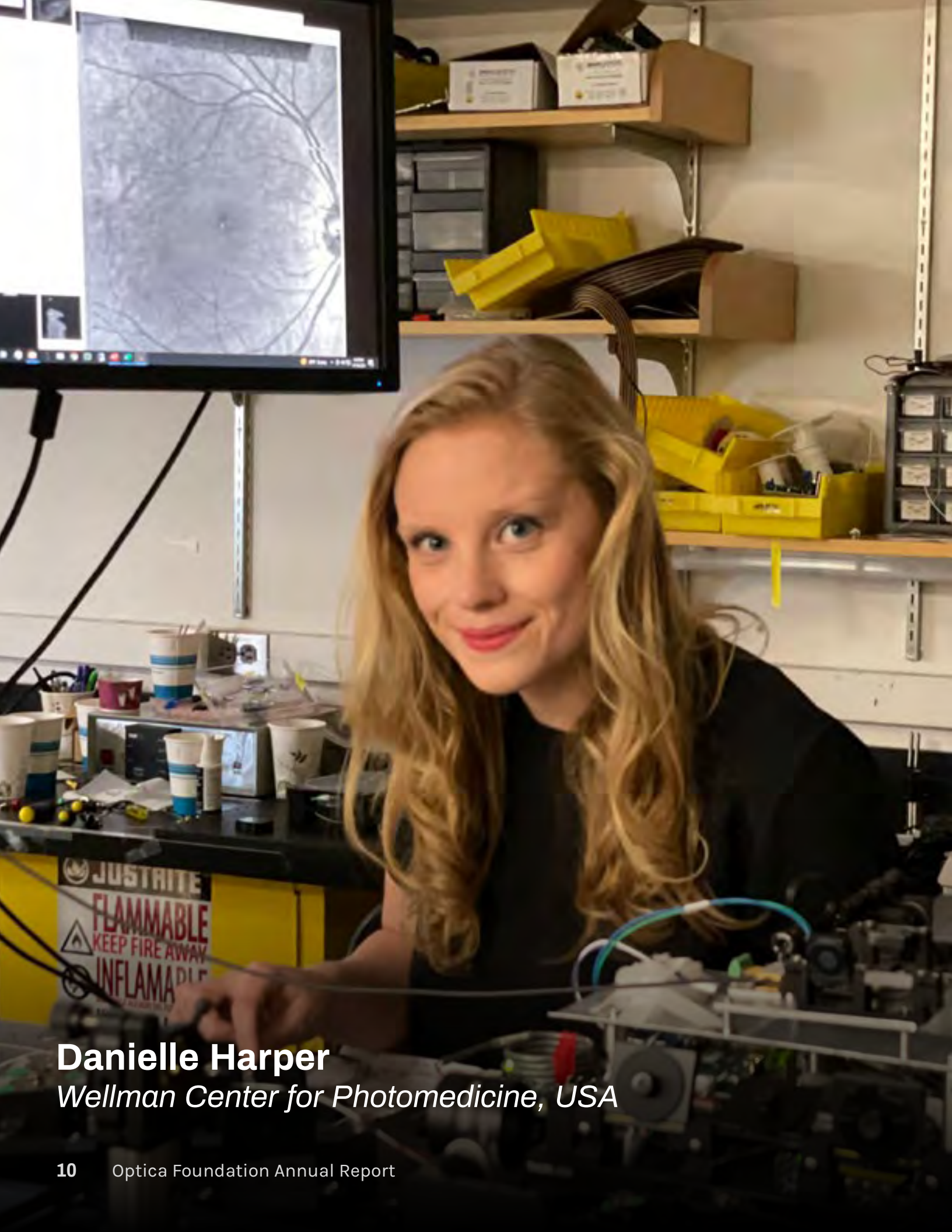
This is an investment in a person's commitment to advancing science through non-traditional career paths such as public policy, government, and journalism.

**Madison Rilling**, Optonique, was selected for her commitment to pivot her career and focus on bringing industry and government together to address important challenges, including climate change and healthcare.

[optica.org/pivoting](https://optica.org/pivoting)



**Madison Rilling**  
*Optonique, Canada*



**Danielle Harper**  
*Wellman Center for Photomedicine, USA*

# Thomas F. Deutsch Fellowship in Biomedical Optics

Offered in partnership with the Massachusetts General Hospital (MGH) Wellman Center for Photomedicine, this one-year multidisciplinary opportunity specifically fosters interactions between researchers from diverse fields of science and medicine and supports post-doctoral investigators pursuing training in either basic or clinical research.

In 2021, the fellowship was awarded to **Danielle Harper**, Wellman Center for Photomedicine, for her plans to develop a state-of-the-art polarization sensitive optical coherence tomography imaging system and bring this technology directly into the operating theater to help surgeons identify nerves.

[optica.org/deutsch](https://optica.org/deutsch)

In partnership with:



Founding donor:



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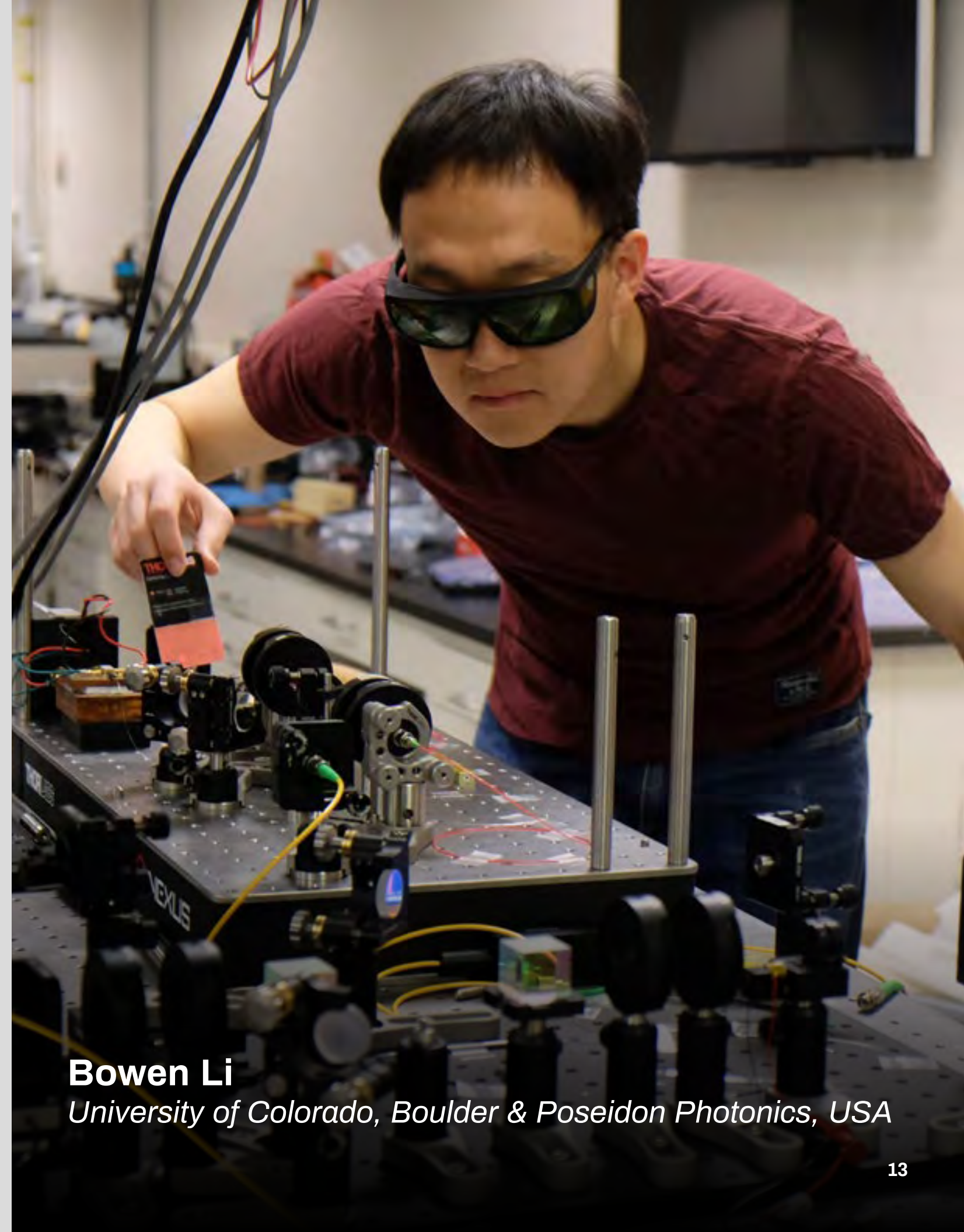
# Bernard J. Couillaud Prize in Ultrafast Lasers

In partnership with Coherent, Inc, the Couillaud Prize provides the opportunity for an early-career professional to pursue a compelling and innovative project that has the potential to make a meaningful and positive impact on the science and applications of ultrafast lasers. The winners receive a US\$20,500 prize and US\$5,000 in travel expenses.

The 2021 prize is presented to **Bowen Li**, University of Colorado, Boulder and Poseidon Photonics. His winning research is on the bidirectional all-normal-dispersion (BANDi) fiber laser, which is a next-generation dual-comb laser source that generates two frequency combs from a single laser cavity. Featuring unprecedented pulse energy, inherent mutual coherence, and high system compactness, it provides a promising solution for practical dual-comb metrology devices that benefit various applications such as molecular spectroscopy, biochemical imaging and precise laser ranging.

[optica.org/couillaud](https://optica.org/couillaud)

Founding donor:



**Bowen Li**  
*University of Colorado, Boulder & Poseidon Photonics, USA*



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# Ivan P. Kaminow

## Outstanding Early-Career Professional Prize

Established in 2012, this prize honors Ivan Kaminow for his many contributions to the field of optics and photonics, as well as his dedication to mentoring and inspiring early-career researchers. Each year, one early-career professional member receives funding to attend the Optica Leadership Conference and to one of our other technical meetings of their choice.

The 2021 Kaminow Prize recipient is **Brandon Buscaino**, Infinera Corporation, for his ongoing support for Optica student chapters and public policy initiatives as well as his commitment to advancing the impact of foundation opportunities.

[optica.org/kaminow](https://optica.org/kaminow)



### **Brandon Buscaino**

*Infinera Corporation, USA*

Brandon participated in the Faces of Optica campaign and is part of the collection of images captured by photographer Sam Barker on display at [optica.org/faces](https://optica.org/faces).

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# Tingye Li Innovation Prize at OFC

The Tingye Li Innovation Prize, established in 2013, honors his impact to the field of optics and photonics. This prize is presented to early-career professionals who demonstrate innovative ideas in their accepted presentations during OFC and CLEO. The recipients receive a US\$3,000 prize.

At OFC, the prize was presented to **Nicolas Fontaine**, Nokia Bell Labs, for demonstrating an optical mode sorter that converts an optical beam consisting of a bunch of pixels into thousands of Laguerre-Gaussian (LG) modes. Each of the LG mode can carry independent information and propagate in space and fibers without distortion. The mode sorter could significantly boost communication capacity and improve imaging quality from small biomedical images to large astronomical images.

[optica.org/tingyeli prizeofc](https://optica.org/tingyeli prizeofc)



**Nicolas Fontaine**  
*Nokia Bell Labs, USA*



**Yating Wan**  
*University of California, Santa Barbara, USA*

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## Tingye Li Innovation Prize at CLEO

At CLEO, the prize was awarded to **Yating Wan**, University of California, Santa Barbara, for her paper on the design and characterization of single-frequency quantum-dot lasers at 1.3  $\mu\text{m}$  fabricated with a high-yield process on silicon, demonstrating excellent spectral purity and operation at high bit rates. This innovative work, performed at UCSB, offers a path towards high-volume, low-cost commercial transceivers enabled by Silicon photonics. It is one of the many technical advances that she has demonstrated in integrated photonics.

[optica.org/tingyeliprizecleo](https://optica.org/tingyeliprizecleo)

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# Harvey M. Pollicove Memorial Scholarship in Precision Optics

Established in 2007, this program honors the work of Harvey Pollicove and was made possible by the generous contributions to the H.M. Pollicove Memorial Fund by Harvey's friends and colleagues.

The 2021 recipient was **Tyler Peterson**, University of Arizona, for his optical design and medical imaging research.



**Tyler Peterson**  
*University of Arizona, USA*

"Knowing that my research is aligned with the interests of the optics community is a great feeling, and I look forward to the results this scholarship will fund."

[optica.org/pollicove](https://optica.org/pollicove)

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# Boris P. Stoicheff Memorial Scholarship

Established in 2011 with the Canadian Association of Physicists Foundation (CAPF), this program pays tribute to Boris Stoicheff, an internationally renowned laser spectroscopist and past Optica president (1976) and Canadian Association of Physicists (CAP) president (1983-84).

This scholarship is awarded to an undergraduate or graduate student who has demonstrated both research excellence and significant service to the society or the physics community. The scholarship rotates annually between the Optica Foundation (odd years) and CAPF (even years).

**Murat Yessenov**, University of Central Florida, was recognized for his research in physical optics and space-time wave-packets.



**Murat Yessenov**  
*CREOL, University of Central Florida, USA*

"I am truly honored to receive the scholarship named after Boris Stoicheff – a scientist who excelled both in his academic career and community service. Being a recipient of this scholarship is great motivation for me."

[optica.org/stoicheff](https://optica.org/stoicheff)

# Corning Women in Optical Communications Scholarship & Travel Grants

The Corning Women in Optical Communications Scholarships are merit-based prizes recognizing outstanding women studying optical communications and networking. The 2021 recipients **Deesha Shah**, Purdue University, **Jingyi Yang**, University of California, and **Elisaveta Yeslistrova**, Bauman Moscow State University, were recognized at OFC, the premier event for data center optics and telecom.

In addition, the foundation and Corning offer travel grants to support travel for women participants at OFC. In 2021, these grants were offered as waived registrations for 90 individuals.



**Deesha Shah**  
*Purdue University, USA*

"This scholarship will support my research and goal of becoming a prominent scientist in the field of optics."



**Jingyi Yang**  
*University of California, USA*

"To be recognized is an encouragement to pursue my research and expand my knowledge of the field."



**Elisaveta Yelistratova**  
*Bauman Moscow State University, Russia*

"This support undoubtedly helps me in my pursuit of learning and encourages me to be more engaged in the international research community that is OFC."

## CORNING

[optica.org/corningsscholarship](https://optica.org/corningsscholarship)

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# Corning Outstanding Student Paper Competition

Established in 2007, the Corning Outstanding Student Paper Competition at OFC recognizes innovation, research excellence, and presentation abilities in optical communications.

**Xiaosheng Zhang**, University of California, Berkeley, was recognized for his presentation "Large-scale Silicon Photonics Focal Plane Switch Array for Optical



**Xiaosheng Zhang**  
*University of California Berkeley, USA*

[optica.org/corningpapercompetition](https://optica.org/corningpapercompetition)

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# Theodore Maiman Outstanding Student Paper Competition

Established in 2008, the Theodore Maiman Student Paper Competition at CLEO recognizes innovation, research excellence and presentation abilities in the areas of laser technology and electro-optics.

**Nicholas Nardelli**, National Institute of Standards and Technology & University of Colorado Boulder, was recognized for his presentation "Differential Spectroscopy of Atomic Clocks for Improved Measurement Instability."



**Nicholas Nardelli**  
*National Institute of Standards and Technology & University of Colorado Boulder, USA*

[optica.org/maimanpapercompetition](https://optica.org/maimanpapercompetition)

# Optica Women Scholars

Developed in 2021, 20 Optica Women Scholars will be selected annually and receive a merit and need-based grant of US\$10,000. In addition to the funding, scholars gain access to our global network of mentors and the supporting companies.

In 2021, this program was piloted with the University of Arizona James C. Wyant College of Optical Sciences, and two undergraduate recipients were selected.



**Madeline Bergay**  
*University of Arizona, USA*



**Sarina Grijalva**  
*University of Arizona, USA*

[optica.org/womenscholars](https://optica.org/womenscholars)

## **Founding donors:**

Optica Foundation  
II-VI Incorporated  
Corning Incorporated  
Google LLC  
Intel  
Innolight

Meta  
Neophotonics  
Source Photonics  
Janet Fender and L. John Otten III  
Elizabeth Rogan

# James P. Gordon Memorial Speakership

The James P. Gordon Speakership pays tribute to his numerous high-impact contributions to quantum electronics and photonics, including the demonstration of the maser. The recipient receives an honorarium to present as an invited speaker at CLEO, the world's premier international forum to learn about innovative advances, research and new technologies from the laser science industry.

The recipient was **Chaoyang Lu**, University of Science and Technology China, who presented "Quantum Computational Advantage Using Photons."



**Chaoyang Lu**  
*University of Science and Technology of China, China*

"I am honored to receive the Gordon Speakership and present my work at CLEO. I feel extremely humbled to see the list of past Speakership recipients who are quantum scientists I have been privileged to learn from and admired from afar. My talk on photonic quantum computational advantage covered a race between classical and quantum computers for boson sampling over the years, which, together with many other works in the community, marks the dawn of practical quantum computers."

[optica.org/gordonspeakership](https://optica.org/gordonspeakership)

# NextGen Institute

The [NextGen Institute](#) is a series of schools and accelerators for the future optics and photonics workforce featuring training, skill building and networking led by our renowned corporate leaders and researchers.

The [Siegman International School on Lasers](#) for graduate students featuring in-depth presentations on lasers and their applications from internationally recognized academic and industry leaders. The 2021 program was held as a virtual "All Stars" program on 19-23 July. Top-rated presenters from previous schools were invited to give online presentations and lead problem-based discussion groups. The event culminated in a final plenary from 2018 Nobel Laureate Donna Strickland. In total, 226 participants from 47 countries attended the virtual experience.

The [Innovation School](#) offers an immersive exploration of "customer problem fit" and the "lean canvas model." On 5-9 April, we hosted the Innovation School virtually for a second year. There were 40 participants from 12 countries, including attendees, mentors, speakers, and judges. The program, a week of product development and customer/market research, resulted in 7 unique pitches. The winning concept was Sunshinelance, a tracker for sun exposure and potential cancer risks for outdoor workers.

The [Subsea Optical Fiber Communications School](#) is for students and early-career professionals looking to learn more about future innovations and careers in subsea optical fiber communications. To keep momentum for the upcoming 2022 school, a "mini dive" webinar was held on 5 August for 96 participants.

[Career Accelerators](#) focused on the transition from academia to industry and business skills. This program was on hold in 2021 and will return in 2022.

[optica.org/nextgen](https://optica.org/nextgen)

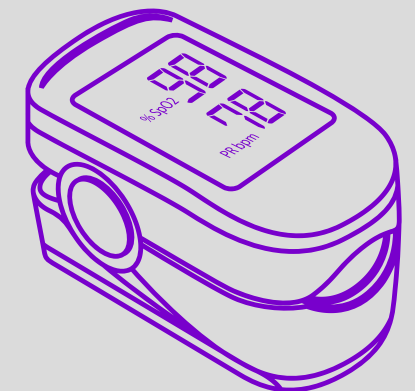
# Additional Opportunities

The foundation also services a variety of travel and publishing grants. Programs active in 2021 included:

- The [Incubic/Milton Chang Travel Grants](#) supported 55 virtual registrations to CLEO and FiO+LS.
- The [Robert S. Hilbert Memorial Student Travel Grant](#) supported 13 virtual registrations to the Design & Fabrication Congress.
- The [Jean Bennett Memorial Student Travel Grant](#) supported 34 virtual registrations to FiO+LS specifically for student members from emerging economies.
- Administered by Optica Publishing Group, the [S. R. Seshadri Publications Grant](#) supported publishing fees for 7 researchers.

## Oximeters for COVID-19 Detection

Special thanks to 2009 Optica President Tom Baer, the Global Health Initiative (GHI) partnered with the Optica Foundation to distribute 13K pulse oximeters. (1,000 in Bangladesh and 12,000 in India).





# Optica 2021 Award and Medal Winners

The Optica awards program recognizes and celebrates the field's technical, research, education, business, leadership and service accomplishments. We encourage the community to consider nominating colleagues for these esteemed awards. The foundation manages the endowments for these recognitions.

[optica.org/awards](https://optica.org/awards)



FREDERIC IVES MEDAL / JARUS W. QUINN PRIZE

## Federico Capasso

*John A. Paulson School of Engineering and Applied Sciences, Harvard University, USA*

for seminal and wide-ranging contributions to optical physics, quantum electronics and nanophotonics.

ESTHER HOFFMAN BELLER MEDAL

## Nicholas Massa

*Springfield Technical Community College, USA*

for outstanding leadership in photonics technician education, including the development and dissemination of innovative educational materials.



MAX BORN AWARD

## Anne L'Huillier

*Lund University, Sweden*

for pioneering work in ultrafast laser science and attosecond physics, realizing and understanding high harmonic generation and applying it to time-resolved imaging of electron motion in atoms and molecules.



**STEPHEN D. FANTONE  
DISTINGUISHED SERVICE AWARD**

**Anthony M. Johnson**

*University of Maryland Baltimore County (UMBC), USA*

for decades of principled leadership and steadfast service to The Optical Society and to the optics community, and especially for serving as a tireless ambassador for OSA.

**MICHAEL S. FELD BIOPHOTONICS AWARD**

**Arjun Yodh**

*University of Pennsylvania, USA*

for pioneering research on optical sensing in scattering media, especially diffuse optical and correlation spectroscopy and tomography, and for advancing the field of biophotonics through mentorship.



**PAUL F. FORMAN TEAM  
ENGINEERING EXCELLENCE AWARD**

**Infinera's Optical Innovation Team**

for the design, development and commercial deployment of a vertically optimized 1.6Tb/s (2x800G) digital coherent optics module, comprised of a large scale photonic integrated circuit, advanced high-speed RF packaging and pioneering real-time DSP ASIC.



**JOSEPH FRAUNHOFER AWARD /  
ROBERT M. BURLEY PRIZE**

**Zeev Zalevsky**

*Bar-Ilan University, Israel*

for significant contributions to the field of optical super-resolution including the invention of many novel concepts bypassing Abbe's limits of diffraction and the geometric limits set by the sensor.



**NICK HOLONYAK JR. AWARD**

**Martin D. Dawson**

*University of Strathclyde and Fraunhofer, United Kingdom*

for wide-ranging contributions to the development and application of III-V semiconductor devices especially including gallium nitride micro-LEDs and optically-pumped semiconductor lasers.

**ROBERT E. HOPKINS LEADERSHIP AWARD**

**Pierre Chavel**

*Institut d'Optique, France*

for outstanding support and promotion of optics throughout Europe, and exceptional leadership in institutions and scientific societies such as OSA, SPIE, ICO, EOS, and SFO.



**EDWIN LAND MEDAL**

**Joseph A. Izatt**

*Duke University, USA*

for foundational contributions to the invention, development, and commercialization of optical coherence-based technologies for in vivo biomedical imaging, and for the education and mentoring of distinguished scientists and engineers.



**ADOLPH LOMB MEDAL**

**Laura Waller**

*University of California Berkeley, USA*

for important contributions to the advancement of computational microscopy and its applications.



**EMMETT N. LEITH MEDAL**

**Bahram Javidi**

*University of Connecticut, USA*

for exceptional innovation and transformative technological impact on the field of information optics, including pioneering contributions to digital holography for life sciences, information security, optical sensing, and processing of photon starved scenes.

**C.E.K. MEES MEDAL**

**Halina Rubinsztein-Dunlop**

*University of Queensland, Australia*

for pioneering innovations in the transfer of optical angular momentum to particles, using sculpted light for laser manipulation on atomic, nano- and microscales to generate fundamental insight and provide powerful probes to biomedicine.



**ELLIS R. LIPPINCOTT AWARD**

**Rohit Bhargava**

*University of Illinois at Urbana-Champaign, USA*

for contributions to the fundamental physics and instrument engineering of mid-IR microscopy and its applications to medical imaging.



**WILLIAM F. MEGGERS AWARD**

**Keith Nelson**

*Massachusetts Institute of Technology, USA*

for expanding the horizons of impulsive stimulated Raman scattering (ISRS) to the generation of intense tunable terahertz pulses, thus establishing new transient-grating techniques for a more effective application of time-domain coherent nonlinear spectroscopy in the study of condensed phase molecular dynamics.



**DAVID RICHARDSON MEDAL**

**Majid Ebrahim-Zadeh**

*ICFO-The Institute of Photonic Sciences & ICREA-Catalan Institution for Research and Advanced Studies, Barcelona, Spain*

for contributions to the advancement of nonlinear optical technology and commercial development of cutting-edge optical parametric oscillators.

**KEVIN P. THOMPSON  
OPTICAL DESIGN INNOVATOR AWARD**

**Rengmao Wu**

*Zhejiang University, China*

for achievements in theory and computational methods for freeform illumination optics.



**EDGAR D. TILLYER AWARD**

**David H Brainard**

*University of Pennsylvania, USA*

for groundbreaking experimental and theoretical contributions to our understanding of how the visual system resolves the ambiguities inherent in sensory signals to produce a stable percept of object color.



**CHARLES HARD TOWNES MEDAL**

**Mikhail Lukin**

*Harvard University, USA*

for his pioneering theoretical and experimental contributions to quantum nonlinear optics and quantum information science and technology, and for the development and application of nanoscale quantum systems for sensing.



**TREASURER'S AWARD**

**Kelly Cohen**

*Optica, USA*

for her strong leadership, ingenuity, and resourcefulness in leading many successful OSA Publishing Group initiatives.

**TREASURER'S AWARD**

**Terence Patrick Rooney**

*Optica, USA*

for providing a world-class experience to student chapters through his genuine energy and thoughtful innovation.



# 2021 Investment and Impact

**JOHN TYNDALL AWARD**

**Michal Lipson**

*Columbia University, USA*

in recognition of her fundamental and technological advances in integrated photonic devices.



**HERBERT WALTHER AWARD**

**Wolfgang Peter Schleich**

*Universitat Ulm, Germany*

for pioneering contributions to topics including gyroscopes and general relativity, Schleich-Wheeler oscillations, quantum state engineering, quantum optics in phase space, Gauss-sum factorization and wave packet dynamics and the red shift controversy resolution in atom interferometry.

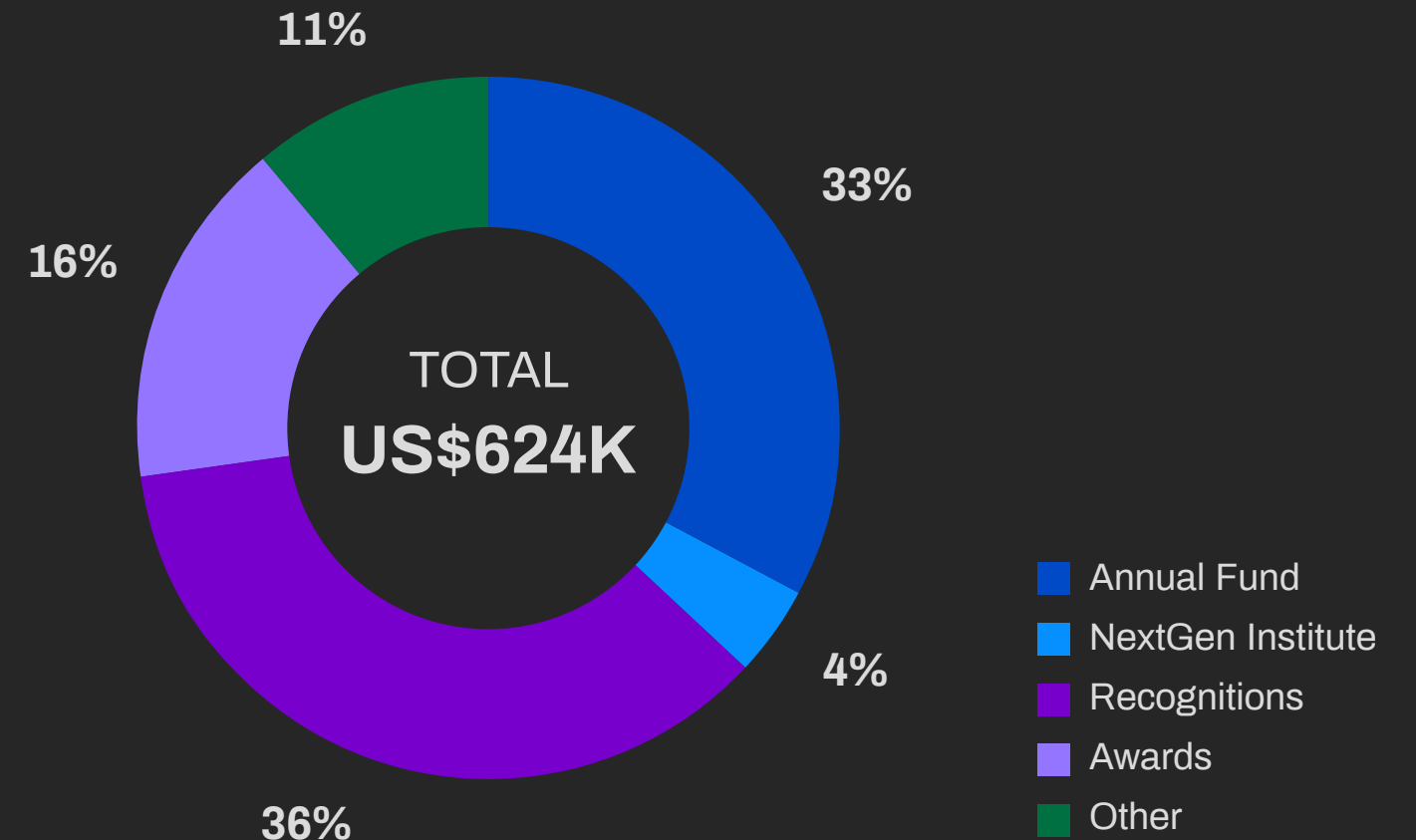


**R. W. WOOD PRIZE**

**Tobias Kippenberg**

*Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland*

for pioneering contributions to the realization of chip-scale optical frequency combs.



Program disbursement and impact numbers reflect Optica Foundation activity only. Investment by Optica in students, early-career professionals, global advocacy, diversity and inclusion and other programs not included.

# Board of Directors



**CHAIR**  
**Eric Mazur**  
*Harvard University, USA*



**PAST CHAIR**  
**Alexander Sawchuk**  
*University of Southern California, USA*



**DIRECTOR**  
**Antigone Marino**  
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(CNR) National Research Council, Italy*



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**DIRECTOR**  
**Eve Griliches**  
*Cisco, USA*



**CHIEF EXECUTIVE OFFICER**  
**Elizabeth Rogan**  
*Optica, USA*



**EXECUTIVE DIRECTOR**  
**Chad Stark**  
*Optica Foundation, USA*

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# Lifetime Donors

## Lifetime \$1,000,000+

Milton and Rosalind Chang  
Huawei Technologies Co., Ltd.  
Optica (formerly OSA)  
Donald R. and Carol Scifres (Founding Donor)  
Patricia Wakeling\*

## Lifetime \$200,000+

Gary C. and Carolyn M. Bjorklund (Founding Donor)  
Coherent Inc.  
Corning Inc.  
Joseph W. and Hon Mai Goodman (Founding Donor)  
Google LLC  
IPG Photonics Corporation  
Meta  
The Sawchuk Family Foundation (Founding Donor)  
Thorlabs Inc.  
Anonymous (1)

## Lifetime \$100,000+

II-VI Incorporated  
Janet S. Fender and John L. Otten  
Innolight Technology USA Inc.  
Intel Corporation  
Burton McMurty\*  
NEOPhotonics Corp.  
Elizabeth A. Rogan  
Jannick Rolland  
Alice Sinclair  
The Welch Family Fund (Founding Donor)

\*Deceased

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# Planned Giving

We encourage members of the community to consider including the foundation in their wills and estates to leave a legacy of impact for our students and early-careers. Whether donating a specific dollar amount or percentage of your estate, we recommend connecting with us after consulting with a tax advisor.

For more information please contact [foundation@optica.org](mailto:foundation@optica.org) or visit [optica.org/plannedgiving](https://optica.org/plannedgiving).

The following individuals, families and trusts have indicated the foundation in their wills and estates.

William Bridges  
Gary Bjorklund  
Charles Clark  
Stephen Fantone  
James Fienup  
Robert A. Fisher  
David N. and Lisa M. Fittinghoff  
Joseph A. and Mary A. Giordmaine  
Joseph Goodman  
Arthur Guenther\*  
David Hardwick  
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